

ULTRA WIDEBAND ANTENNA HAVING FREQUENCY SELECTIVITY

ABSTRACT OF THE DISCLOSURE

An electromagnetic antenna apparatus exhibits a generally continuous signal response between a first frequency and a second frequency, and further exhibits a deviation from the signal response in a frequency region centered substantially at a selected frequency between the first frequency and the second frequency. The apparatus includes: (a) an antenna transceiving element; (b) a feed structure coupled with the antenna receiving element for communicating transceiving signals with the antenna transceiving element; and (c) a discontinuity structure in the antenna transceiving element coupled with the feed structure. The discontinuity structure is configured for effecting return of selected transceiving signals to the feed structure as return signals. The return signals effect the deviation.